

REMARKS

Claims 1-20 are all the claims pending in the application. Support for the amendment to claims 1 and 11 may be found in the specification as originally filed, for example, at page 5, lines 26 to 30.

I. The Rejection Under 35 U.S.C. §103

Claims 1-20 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Raychaudhuri et al (EP 0747895 A2) in view of Hurditch et al (U.S. 5,952,073).

Applicants respectfully submit that the present invention is not obvious over the disclosures of Raychaudhuri et al in view of Hurditch et al and request that the Examiner reconsider and withdraw this rejection in view of the following remarks.

In the Final Office Action, dated June 6, 2002, in the "Response to Arguments" Section, page 3, the Examiner states:

Applicant argues unlike the definitions of Applicant's invention, the thickness discussed in Raychaudhuri is not for the recording layer, but rather is for the combination of the recording layer and the reflecting layer. [The] Examiner disagrees because the prior art discloses the thickness of the recording layer on page 6, line 3 and the thickness of the individual layers can be adjusted (page 5, line 53).

Applicants respectfully submit that the Examiner is reading Raychaudhuri et al, page 6, line 3, in error. The cited description in Raychaudhuri et al reads:

The reflecting layer 14 for all of these recording layers were 800 angstrom thick Au layer that was sputtered in pure Ar.

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DIS → However, the individual layers which can be adjusted are individual sublayers 12a, 12b, constituting the recording layer, which is not a recording dye layer but rather is a complex metal oxide layer of the formula $(Te_aBe_bC_cH_dO_e)$, as described in Raychaudhuri et al, page 4, line 20. The sublayers have different compositions.

In view of the above, Applicants respectfully submit that the Examiner's characterization of the teachings of Raychaudhuri et al is inappropriate and that Raychaudhuri et al does not support the Examiner's position and the rejection.

The Examiner further states:

Applicant argues that unlike the claimed invention, the thickness discussed in Raychaudhuri is not for the recording layer but for the recording and reflecting layer. This is not true because Raychaudhuri contemplates the thickness of the sublayers as well (page 5, line 53).

The cited description in Raychaudhuri et al reads:

... the 70% reflectivity in first minimum position is achievable in many ways, namely, by adjusting the thickness composition and CH_4 flow rate, etc. for the individual sublayers.

The indicated description merely teaches that the 70% reflectivity can be achieved by the adjustments of various factors for the individual sublayers. This description does not teach or disclose the characteristic features of Applicants' claimed invention.

Furthermore, the examiner states:

It should be noted that the Raychaudhuri reference reads on a recordable element that can include different types of elements including DVD.

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Raychaudhuri et al refers to the specific recording layer of complex metal oxide material of the formula $(\text{Te}_a\text{Be}_b\text{C}_c\text{H}_d\text{O}_e)$ and the element reflectivity of about or greater than 70% at above 780 nm for the recording layer of the specific material. It is readily apparent that the reflectance of the metal oxide material differs from that of an organic dye material.

Further, the reference to the wavelength of 780 nm in Raychaudhuri et al means that the recording element is written and read by the laser of about 780 nm, which is not a DVD-R but is a CD-R. Raychaudhuri et al teaches the use of a multi-layer recording element made of metal oxides having different composition. In contrast, Hurditch is directed to a dye composition for optical recording media. The dye compositions of Hurditch are irrelevant to the teachings of Raychaudhuri, which relate to metal oxides. Again, the reflectance of the metal oxide material differs from that of an organic dye material.

The combination of elements from non-analogous sources, in a manner that reconstructs the applicant's invention only with the benefit of hindsight, is insufficient to present a *prima facie* case of obviousness. There must be some reason, suggestion, or motivation found in the prior art whereby a person of ordinary skill in the field of the invention would make the combination. That knowledge can not come from the applicant's invention itself. In re Oetiker, 24 USPQ2d 1443, 1446 (CAFC 1992). Thus, Applicants respectfully submit that the

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rejection based on the combination of Raychaudhuri reference and Hurditch is not proper.

In summary, Applicants respectfully submit that the Examiner's characterizations of the teachings of Raychaudhuri are not correct and Applicants respectfully submit that the combination of Raychaudhuri and Hurditch would not have been made or obvious to one of ordinary skill in the art.

II. Conclusion

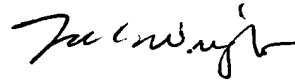
In view of the above, Applicants respectfully submit that their claimed invention is allowable and ask that the rejection under 35 U.S.C. §103 be reconsidered and withdrawn. Applicants respectfully submit that this case is in condition for allowance and allowance is respectfully solicited.

If any points remain at issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the local exchange number listed below.

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Applicants hereby petition for any extension of time which may be required to maintain the pendency of this case, and any required fee for such extension is to be charged to Deposit Account No. 19-4880.

Respectfully submitted,



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WASHINGTON OFFICE



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PATENT TRADEMARK OFFICE

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APPENDIX
VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

The claims are amended as follows:

1 (Twice Amended). A recordable digital video disc comprising a transparent disc substrate provided with a spiral pregroove having a depth of 100 to 200 nm and a half width of 100 to 450 nm, a recording dye layer placed in the pregroove on which information is recorded by irradiation with a laser beam, and a light-reflecting layer, arranged in order, wherein the recording dye layer has a thickness in the range of 40% to 90% of a thickness corresponding to an optical path which gives the first minimum reflectance, the optical path giving the first minimum reflectance being determined from a reflectance curve which is prepared using [a laser beam having a wavelength of 600 to 700 nm and] recordable digital video discs composed of the same disc substrate, the same recording dye layer having varying thickness, and the same light-reflecting layer.

11 (Twice Amended). A recordable digital video disc comprising a transparent disc substrate provided with a spiral pregroove having a depth of 100 to 200 nm and a half width of 100 to 450 nm, a recording dye layer placed in the pregroove on which information is recorded by irradiation with a laser beam, a light-reflecting layer, and a disc substrate, arranged in order, or comprising a pair of [a] transparent disc substrates provided with a spiral pregroove, a recording dye

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layer placed in the pregroove on which information is recorded by irradiation with a laser beam, and a light-reflecting layer, arranged in order, said recording dye layers being placed between the transparent disc substrates, wherein each of the recording dye layers has a thickness in the range of 40% to 90% of a thickness corresponding to an optical path which gives the first minimum reflectance, the optical path giving the first minimum reflectance being determined from a reflectance curve which is prepared using [a laser beam having a wavelength of 600 to 700 nm and] recordable digital video discs composed of the same disc substrate, the same recording dye layer having varying thickness, and the same light-reflecting layer.